

Radio Appeals Save Many Lives



THE RADIO AMATEUR, LEFT, HAS BUILT HIS OWN SET INTO THE FAMILY CUPBOARD. AT RIGHT, A GIRL "NOVICE" IS LISTENING IN.

This is the sixth of a series of articles by Frank George, wireless expert, on the principles of radio.

BY FRANK GEORGE
(Checked and Approved by Radio Section, U. S. Bureau of Standards.)

In no other country in the world is the amateur radio operator as free from restraint as in the United States. The only restrictions placed on his activities are with regard to wave lengths and licensing. This is to prevent confusion in the air lanes.

The amateur operator is not necessarily a small boy. Many amateurs are mature men and women who possess most efficient radio stations. The term "amateur" operator as distinguished from "commercial" operator is used simply to designate operators who are in radio merely for love of the art.

The radio "novice" is one who has only received a set for the purpose of "listening in." Of amateurs there are more than 13,000; of novices, 600,000.

Amateur's Work.

To the amateur operators is due much of the credit for the position the United States occupies in radio work. The rapidity of the practical development of long distance radio communication has been largely the result of tests and experiments conducted by amateurs in determining the efficiency or inefficiency of equipment.

Fully 90 percent of the radio operators in the American military or naval services during the war were

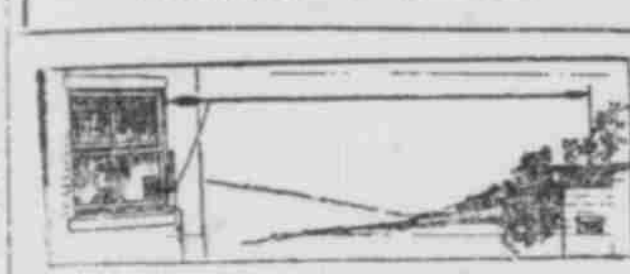
recruited from the ranks of amateur operators.

The amateurs have also been of valuable assistance to the Department of Commerce with its limited inspection force in helping to administer the radio laws. They have served as radio policemen in holding the beginner within proper limits and in preventing the encroachment of amateur work on commercial activities.

The development of the radio-phones should accelerate rather than restrict further expansion of the amateur field. When entire towns have been devastated by fire, storm or flood, the radio amateur has frequently provided the only means of communication. Service of this kind will always be needed.

Without the co-operation of amateurs it would not have been possible for the Department of Agriculture quickly to demonstrate the practicability of an agricultural news broadcast service.

Radio Primer



Aerial or Antenna—Any conductor used in the reception or transmission of radio waves.

Col. Charles A. Carlisle Writes Of Interesting Trip to the Orient

BY COL. C. A. CARLISLE

S. S. GOLDEN STATE, at Sea, Feb. 7.—(By mail)—Over 6,000 miles from home and we continue to run south by east at the rate of 17 knots per hour. We have over 500 miles yet to go, and expect to dock at Manila on Thursday morning. The great South Sea carnival is now in full swing at Manila, and we will arrive in time to enjoy and participate in the last two days—it promises to be exciting, and will offer us an opportunity to see the natives in action.

This has been a most interesting voyage and I wish that you could all take it with us. We left home Monday, Jan. 9, and sailed from San Francisco on the 14th. Our first stop enroute was Honolulu and we shall not soon forget the interest there, but the stay of one day is too short.

Our next stop was Yokohama, Japan, arriving Monday, the 30th. Have you ever been in Japan? If not, it's hard to give the impression by letter that one feels personally when you go down the "gangway" and step out upon foreign soil. The "Rickshaw" men eager for the fare, solicit your patronage in polite, but insistent manner. The ride along the shore boulevard to the Grand hotel which faces the sea is interesting, and these little "Japs" men travel swiftly, but not as fast as the "Chinamen."

Everybody goes to the Grand hotel. It's a meeting place, and from it the shopping district is handy, and perhaps, after all, it's a "Jap" custom, because your first impression is splendid—much better than your going away impression. In fact our departure was rather disappointing—we felt a depression in spirit, and found it so much different from our entrance and departure from China. Perhaps it's only our idea of standards, but unfortunately we felt the "Jap" was so serious that his whole aim in life was to get all he could and contribute as little as possible, with the result that all cheerfulness is extracted out of life. You rarely see the children jump or shout or laugh, and never the men or women.

They are polite when you address them, but they are a serious people, and one that we can well afford to leave alone. The less we have to do with them as a race, the better for us. Of course, there is the artistic side of Japan, and upon our return there when the cherry blossom is in bloom we will have much to say, and enthusiastically.

Our next stop was at Kobe, Japan, but like Yokohama, it had little to offer that was of special interest at this time of the year, except its great shipbuilding industries and its potteries, and its great shipping activity. The harbor was filled with sea-going vessels several hundred of every class and kind, and, of course, this made an interesting scene. The real beauty of the voyage followed leaving Kobe as we entered and passed through the "Inland Sea."

Have you ever been down the St. Lawrence, or through the Georgian bay districts, if so, just double them up, multiply them if you can in grandeur and beauty, and you get a glimpse of the Inland sea. One traveler who has gone round and round the world said to me that the trip through the "Inland Sea" is the grandest, and most interesting stretch of its kind in the world, and we accept his statement as correct, because we were fortunate to see it, at the best. The sunlight and the shadows, the rugged shore line, the fertile valley beyond, the snow-capped mountain range in the rear, the quaint little old-fashioned fishing villages, the great rocks tower-

It is generally of copper wire. Forms of aerials are single wire strung between two or more high points; flat top, holding several wires in parallel; cage antenna, formed like a cylinder between two points, and loop antenna for interior radio receiving set.

Whole Set in Cigar Box



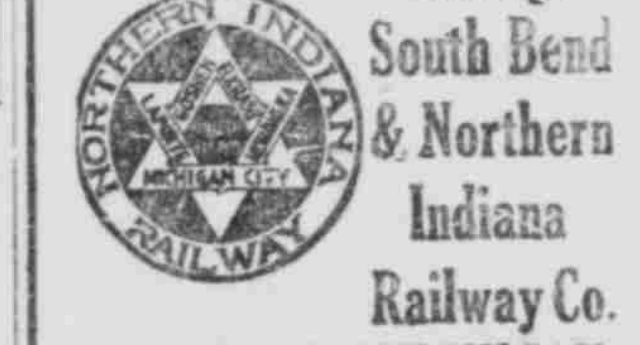
KANSAS CITY, Mo., March 18.—Two wire coils, a crystal detector, some sheets of copper and R. R. Stewart of this city finished his cigar box receiving set.

This set is so small that Stewart carries a pair of head receivers and enough wire for aerial in the box. The only finished instruments Stewart bought were the crystal set and the receivers. The condenser he made of 12 sheets of copper, 2 inches by 1 inch in size, separated by wax paper.

"It is as good as the average crystal set," says Stewart.

I buy and sell the stock of the Radio Corporation of America and suggest its purchase for a good profit. Guthrie, 422 J.M.S.

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EFFECTIVE NOV. 20, 1921.

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East	West	North	South
Round	Round	Round	Round
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7:00 a.m.	9:00 a.m.	9:15 a.m.	9:30 a.m.
8:00 a.m.	10:00 a.m.	10:15 a.m.	10:30 a.m.
9:00 a.m.	11:00 a.m.	11:15 a.m.	11:30 a.m.
10:00 a.m.	12:00 noon	12:15 noon	12:30 noon
11:00 a.m.	1:00 p.m.	1:15 p.m.	1:30 p.m.
12:00 noon	2:00 p.m.	2:15 p.m.	2:30 p.m.
1:00 p.m.	3:00 p.m.	3:15 p.m.	3:30 p.m.
2:00 p.m.	4:00 p.m.	4:15 p.m.	4:30 p.m.
3:00 p.m.	5:00 p.m.	5:15 p.m.	5:30 p.m.
4:00 p.m.	6:00 p.m.	6:15 p.m.	6:30 p.m.
5:00 p.m.	7:00 p.m.	7:15 p.m.	7:30 p.m.
6:00 p.m.	8:00 p.m.	8:15 p.m.	8:30 p.m.
7:00 p.m.	9:00 p.m.	9:15 p.m.	9:30 p.m.
8:00 p.m.	10:00 p.m.	10:15 p.m.	10:30 p.m.
9:00 p.m.	11:00 p.m.	11:15 p.m.	11:30 p.m.
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TAYLOR SUSPECT FOUND IN MEXICO

Former Officer of Canadian Army is Arrested—Ranchers Hear Threat.

LOS ANGELES, Calif., March 18.—A former officer in the Canadian army, arrested last night in West-cali, Baja, Calif., Mexico, in connection with the William D. Taylor murder, arrived here this morning in custody of Detective Serg. Jesse A. Kinn and Edward King.

He was arrested by Col. Jose Avila, chief of the Mexican secret service on information supplied from the American side of the line.

The man now under arrest has been sought for some time. Police would not permit his name to be revealed. He is wanted on the strength of a story furnished Dist. Atty. Woolwine's office, by L. A. Cock, Santa Ana rancher.

Cock said that on Jan. 31, the night before the Taylor shooting, he picked up two men on the highway into Santa Ana giving them a "lift" in his machine.

One wore parts of a Canadian uniform.

On the way into Santa Ana, according to Cock, the strangers discussed a certain former captain of the Canadian army then living in southern California.

"I'm going to get that bird if it is the last act of my life," one of them said, with a string of oaths, according to Cock.

When the two men stepped from the machine in Santa Ana the one who made the remarks dropped a .38 calibre revolver from his coat pocket, Cock said.

It was such a weapon with which Taylor met his death.

PATTEN, ACE OF PIT, DEFEATS HECKLERS
CHICAGO, March 18.—"Battlin' Jim" Patten, once the terror of the wheat pit, was back in fighting form today.

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In appearance it is as you see it here pictured, a really beautiful library lamp—massive, rich, handsome.

Lift the upper half of the shade and a perfect photograph is exposed. The turntable, record, needle, etc., are cunningly illuminated by a tiny electric lamp, making it easy to play.

Motor is electrically driven so that the tiresome round of wind, wind, wind is entirely done away with. The base is of solid cast bell bronze, heavily plated with real gold. Shade is of fine silk, richly ornamented with gold lace, gold tassels and silk or chenille fringe.

Two incandescent bulbs supply the illumination.

The phonograph instrument itself is a wonder of perfection, with unsurpassed tonal qualities. Plays any make of record and you don't have to wind it!

You are cordially invited to call and see this machine which is a thing of beauty, and hear the most perfect reproduction of the human voice ever invented. Store open evenings.

Cheer up the home with a "CAPITOL."

"Oh, Boy," Dance music, nothing like it this side of "Dreamland."

CENTRAL ELECTRIC CO.
128 South Main Street

Patten, millionaire grain dealer, while addressing the Evanston Woman's club on the work of the committee to enforce the Landis' decision in the dispute over wages in the building trades, was heckled by a few roan, friends of the unionists at the meeting.

Patten flung back taunt for taunt and dared them "all to do your damndest." Patten clenched his fists, stuck out his square chin and told the blazers:

"I've started out to say something, and by God I am going to finish it. I always finish what I start."

He did.

Asked if the committee would confine itself to the Landis' award Patten answered:

"Not by a damned sight. We will clean it up, or die."

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